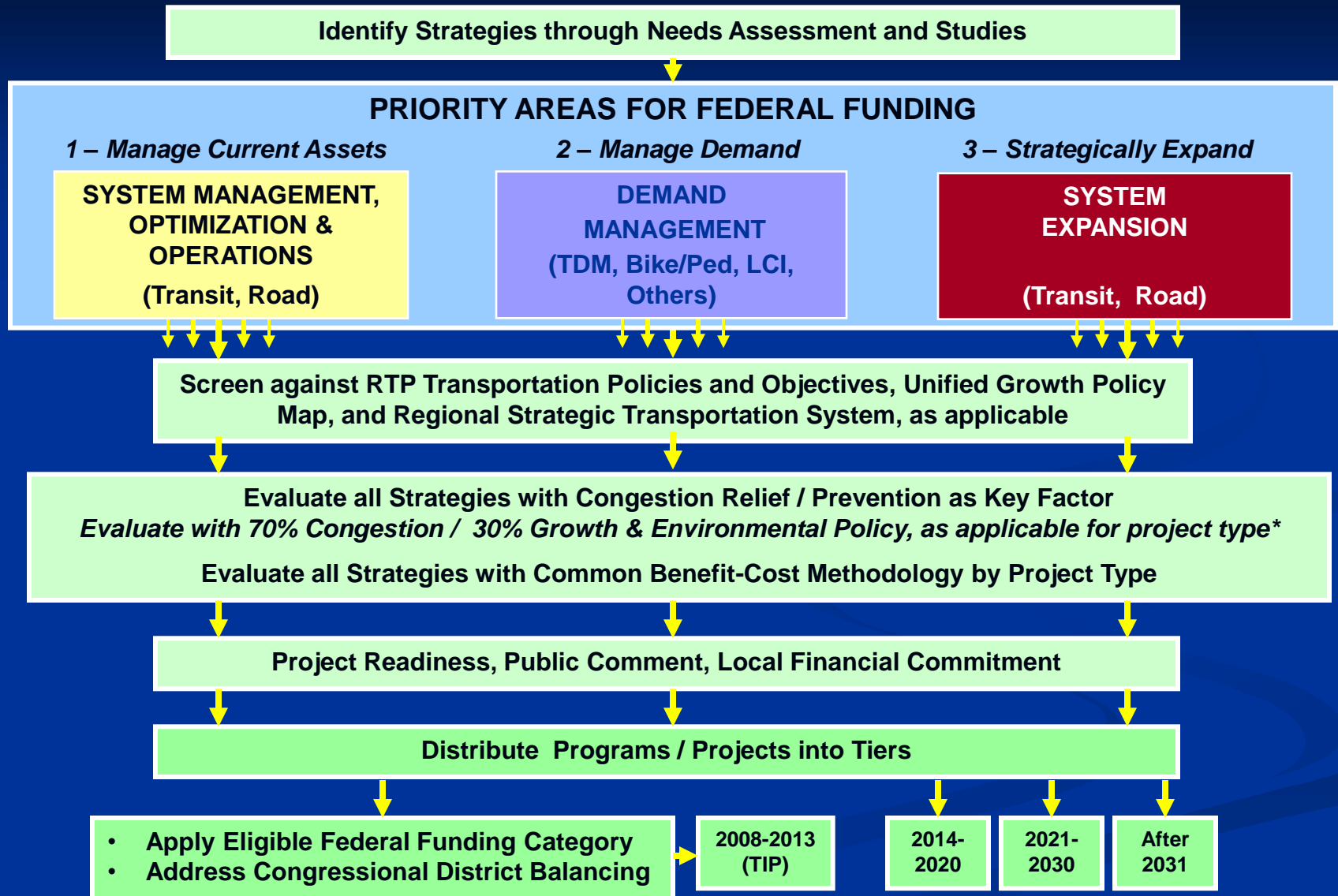# Transit Project Prioritization
"Atlanta Urbanized Area"

March 26, 2009
FTA PPP Workshop
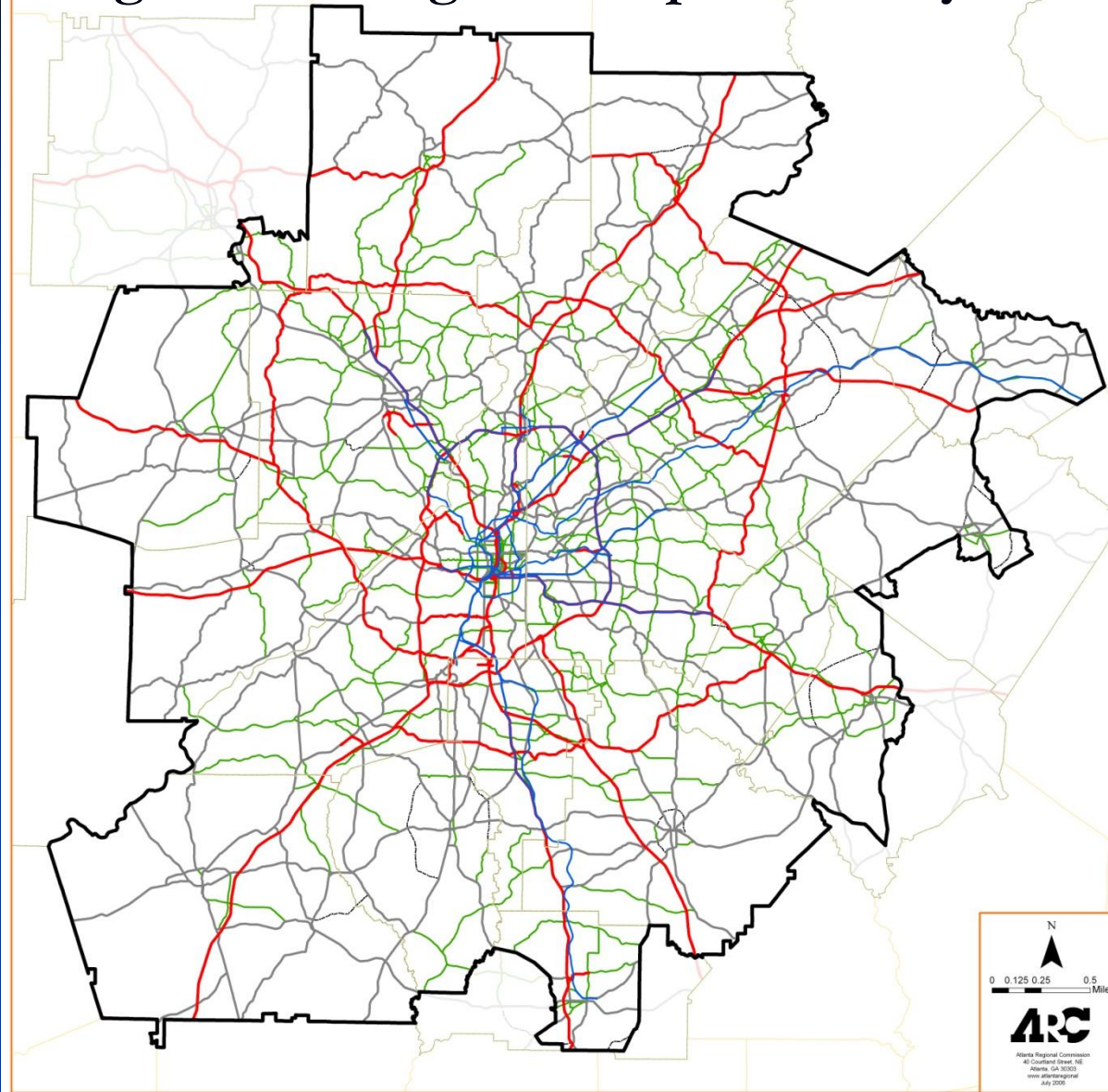
Federal Funding Decisions Framework

Identify Strategies through Needs Assessment and Studies

PRIORITY AREAS FOR FEDERAL FUNDING

1 – Manage Current Assets

2 – Manage Demand

3 – Strategically Expand

SYSTEM MANAGEMENT, OPTIMIZATION & OPERATIONS

(Transit, Road)

DEMAND MANAGEMENT
(TDM, Bike/Ped, LCI, Others)

SYSTEM EXPANSION

(Transit, Road)

Screen against RTP Transportation Policies and Objectives, Unified Growth Policy Map, and Regional Strategic Transportation System, as applicable

Evaluate all Strategies with Congestion Relief / Prevention as Key Factor
Evaluate with 70% Congestion / 30% Growth & Environmental Policy, as applicable for project type*

Evaluate all Strategies with Common Benefit-Cost Methodology by Project Type

Project Readiness, Public Comment, Local Financial Commitment

Distribute Programs / Projects into Tiers

- Apply Eligible Federal Funding Category
- Address Congressional District Balancing

2008-2013 (TIP)

2014-2020

2021-2030

After 2031

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Technical Evaluation

- System Expansion

- On RSTS

- Construction in LR

- Within MPO boundary

- Federal funding

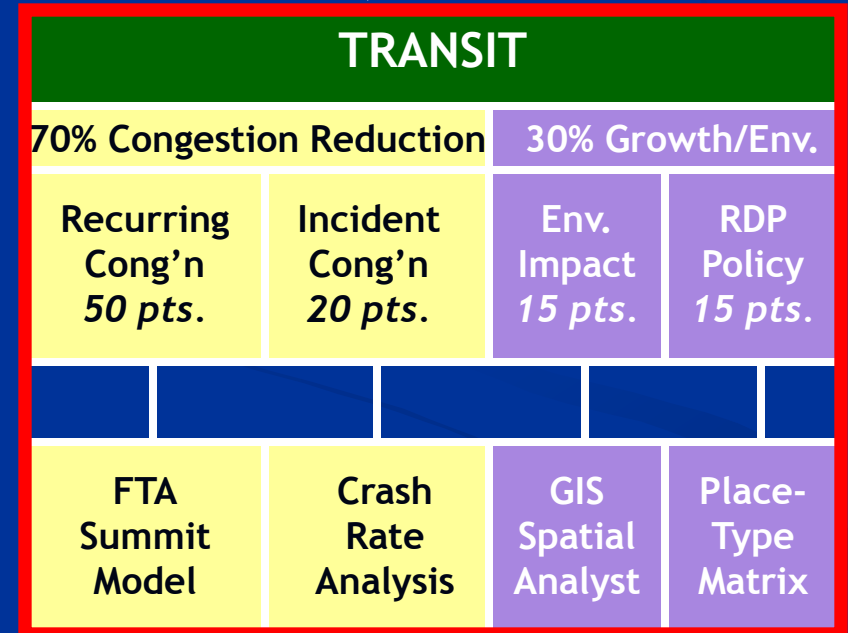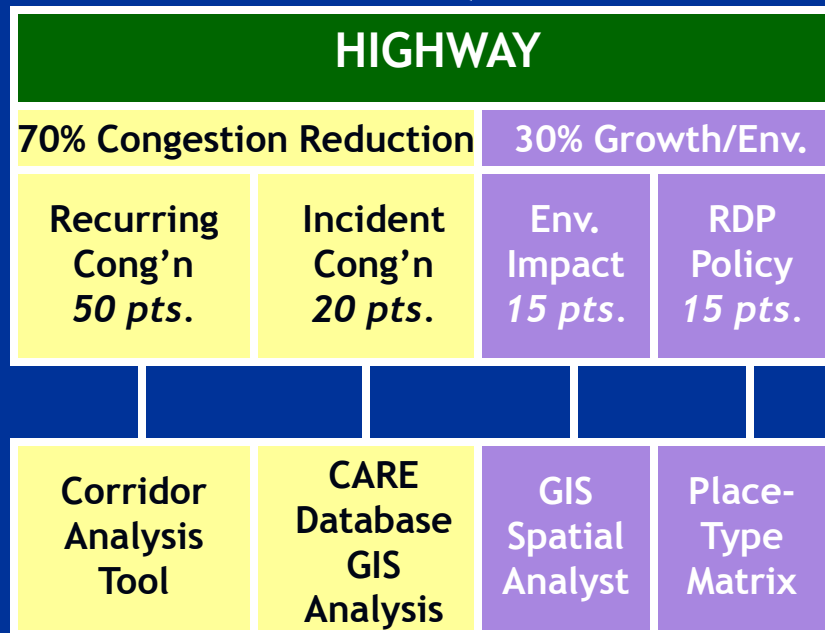## Regional Strategic Transportation System

Regional Strategic Transportation System

— Interstate & National Highway System
— State Highways
— Current & Proposed Premium Transit (Heavy Rail, Commuter Rail, Light Rail, Bus Rapid Transit)
--- New RSTS Alignments (Planned Bypasses and RSTS Connecting Facilities)
— Cross-Regional Arterial System

— MPO Boundary
☐ County Boundaries
▨ Cities

System Expansion Technical Analysis

LONG RANGE SYSTEM EXPANSION PROJECTS ON THE RSTS

HIGHWAY

70% Congestion Reduction		30% Growth/Env.	
Recurring Cong'n *50 pts.*	Incident Cong'n *20 pts.*	Env. Impact *15 pts.*	RDP Policy *15 pts.*
Corridor Analysis Tool	CARE Database GIS Analysis	GIS Spatial Analyst	Place-Type Matrix

TRANSIT

70% Congestion Reduction		30% Growth/Env.	
Recurring Cong'n *50 pts.*	Incident Cong'n *20 pts.*	Env. Impact *15 pts.*	RDP Policy *15 pts.*
FTA Summit Model	Crash Rate Analysis	GIS Spatial Analyst	Place-Type Matrix

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70% Congestion Reduction

Recurring Delay (Transit) – 50 points

- **FTA Summit model**
  - **Travel model post-processor run for each transit project**
    - **Estimates change in number of transit trips and resulting user benefits produced by project**
  - **Measures all quantifiable benefits to existing and new users of the transit system**
- **Benefits determined through comparison of 2030 Build and 2030 No Build scenario**

Scoring Recurring Delay Benefits

Range of project-level results used to determine (percent) rank and score for each project

	User Benefit Hours					
	No Build	**Build**	**Change**	**%Change**	**%Rank**	**Pts.**
Project 1	41	100	59	144%	1.00	50
Project 2	55	75	20	36%	0.50	25
Project 3	150	170	20	13%	0.25	12
Project 4	75	80	5	7%	0.00	0
Project 5	90	150	60	67%	0.75	38

4RC

70% Congestion Reduction

Non-Recurring Delay (Transit) – 20 Points

- **Measure of incident congestion benefit provided by transit**

  - **Transit is a safer mode of travel when looking at number/rate of accidents**

  - **Congestion relief tied to assumed reduction in roadway incident delay when travel is shifted to a safer mode**

  - **Congestion benefits determined by applying difference in transit crash rates (by transit mode) to roadway crash rates, by transit passenger-miles served**

    - **Produces "number of crashes prevented"**

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Scoring Non-Recurring Delay Benefits

Range of project-level results used to determine percent rank and score for each project

	Crashes Prevented	% Rank	Points
Project 1	80	0.50	10
Project 2	40	0.25	5
Project 3	200	1.00	20
Project 4	154	0.75	15
Project 5	10	0.00	0

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30% Environmental/RDP

Environmental Impact – 15 Points

- **GIS Spatial Analysis – Points assigned based on proximity of project to environmentally sensitive area(s)**
  - Flood Plains
  - Greenspace
  - Wetlands
  - Historic Resources
  - Water Supply Watersheds
  - Water Bodies

- **Range of project-level results (environmental impact) used to determine percent rank and score for each project**
  - Points inverted for overall project scoring

30% Environmental/RDP

RDP Policy Support – 15 Points

- **Points assigned based on how well a project supports place-based transportation objectives**

  - Transit Amenities
  - System Management
  - Connectivity b/w Centers
  - Local Land Use Commitment

  - Supports Grid Network
  - Supports ITS Architecture
  - Supports Bike/Ped Plan
  - Preserves Existing Character

- **Only variable in technical analysis that is not scored based on relative ranking to other projects**

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Project Ranking

- **Total points used to allocate each project into 1 of 3 Tiers**
- **Tier-ranking reflects each project's performance _relative to_ other projects that went through evaluation**

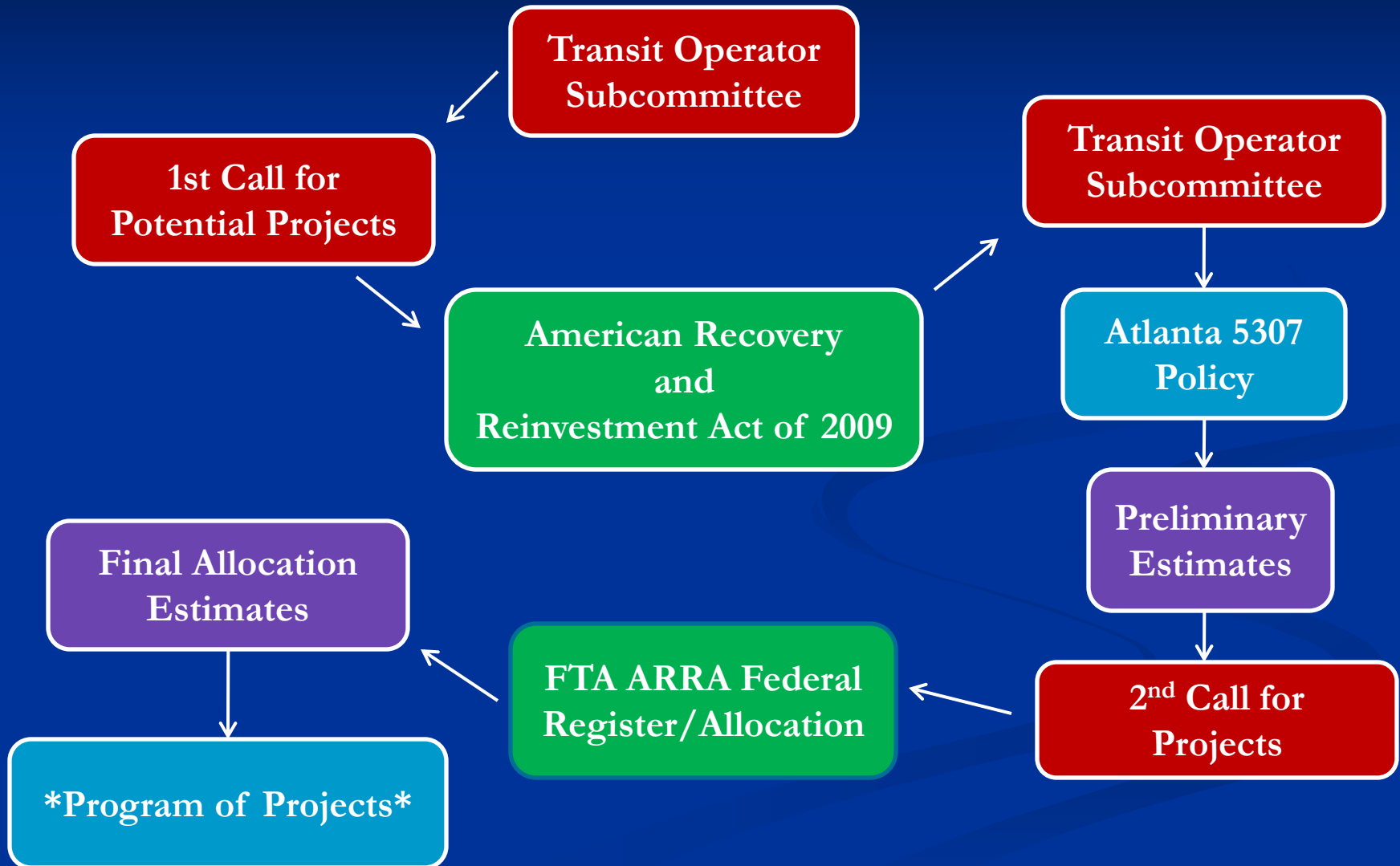| Project	Recurring Delay	Non-Recurring Delay	Env. Impact	RDP Policy Support	Total Pts.	Project Tier
1	30	0	7	3	40	2
2	40	4	2	0	46	2
3	0	12	10	1	23	3
4	10	8	8	2	28	3
5	30	20	10	7	50	1
6	20	16	15	12	67	1

70% Congestion   **30% Growth/Env. Policy**

Prioritizing ARRA Transit Projects "Atlanta Region"

- ✓ **Utilized Transit Operator Subcommittee**
- ✓ **Initial Call To Identify Potential Projects**
- ✓ **3-Tier-Approach To Establish Project Readiness**
- ✓ **ARRA**
- ✓ **Atlanta UZA Adopted 5307 Policy**
- ✓ **FTA 5307 Register/Formula Apportionments**
- ✓ **Final Call**
- ✓ **Program of Projects**

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ARRA Transit Project Prioritization Chart

ARRA Transit Projects
"Atlanta Region"

- Bus Procurement including ADA vehicles
- ITS Equipment and Software
- Preventive Maintenance
- Security Lighting and Surveillance Equipment
- Transit Facility Construction and Rehabilitation
- Transit Enhancements
- Transit Pedestrian Access Improvements

Questions?

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